

Clinical and biological prognostic factors: univariate and multivariate analysis

		Univariate analysis HR (95%CI)	Multivariate analysis HR (95% CI)
FOXP3	0 1+/2+	- HR: 0.34 (0.16-0.74) p<0.0001	- HR: 0.37 (0.17-0.82) p:0.014
Surgical margins	Negative Positive	- 1.96 (1.01-3.83) p:0.048	- 2.33 (0.93-5.83) p:0.72
Mediastinal nodal involvement	No Yes	- 2.56 (1.14-5.77) p:0.023	- 2.10 (0.95-4.64) p:0.066

PUB039

FDG-PET Scanning Has a Limited Role in the Management of Low and Intermediate Grade Neuroendocrine Tumors of Lung



A. Feczko,¹ M. Cattoni,¹ E. Vallieres,¹ L. Brown,² A. Sarkeshik,² S. Margaritora,³ A. Sicilliani,³ P.L. Filosso,⁴ F. Guerrero,⁴ A. Alessandra Sicilliani,⁵ N. Rotolo,⁵ F. Farjah,⁶ G. Wandell,⁶ K. Costas,⁷ C. Mann,¹ M. Hubka,⁸ S. Kaplan,⁸ C. Wilshire,¹ A. Farivar,¹ R. Aye,¹ B. Louie¹ ¹Thoracic Surgery, Swedish Medical Center, Seattle/US, ²Section of General Thoracic Surgery, Dept of Surgery, UC Davis Medical Center, Sacramento/US, ³Unit of Thoracic Surgery, Catholic University 'Sacred Heart', Rome/IT, ⁴Surgical Sciences, University of Torino Italy, Torino/IT, ⁵Center of Thoracic Surgery, University of Insubria, Ospedale Di Circolo, Varese/IT, ⁶Division of Cardiothoracic Surgery, University of Washington Medical Center, Seattle, WA/US, ⁷Division of Thoracic Surgery, Providence Regional Medical Center, Everett, WA/US, ⁸Division of Thoracic Surgery, Virginia Mason Hospital and Seattle Medical Center, Seattle, WA/US

Background: Positron emission tomography (PET) provides information on staging, extent of disease and prognosis in lung cancer. Attempts to use PET in low grade (typical-TC) and intermediate grade (atypical-AC) pulmonary neuroendocrine tumors have led to conflicting results. We aim to assess the utilization of PET and its impact on the risk of recurrence and survival. **Method:** Retrospective review of 436 consecutive patients who underwent resection for primary TC and AC from 2000-2016 in 8 centers. Patients with and without PET were described. We compared 229 patients as PET positive (PET+) or negative (PET-), positive defined as $SUV \geq 2.5$. Factors influencing recurrence and survival were assessed by Cox regression analysis. **Result:** PET was obtained in 52.5% (229/436) of patients with 70.7% (162/229) positive (Table 1). Compared to those without a PET, TC patients with a PET were older with fewer central tumors and underwent more sublobar resections. AC patients were older with fewer central tumors and similar rates of anatomic resection. In 177 TC patients, more recurrences occurred in the PET+ group (6 vs 2, $p=0.06$). The disease free interval (DFI) was shorter in the PET+ group (20.0 vs 63.5 months, $p=0.60$). Overall survival was similar (42.4 vs 44.0 months, $p=0.64$). In 52 AC patients, all recurrences occurred in PET+ patients (10 vs 0, $p=0.76$). The DFI was shorter in the PET+ group (10.7 vs 30.3 months, $p=0.49$). Overall survival was similar (35.5 vs 33.8 months, $p=0.07$). After univariable analysis, a PET+ scan was not associated with survival ($HR=0.27$, 95% CI=0.33-2.91, $p=0.96$) or recurrence ($HR=0.55$, 95% CI 0.62-4.81, $p=0.29$). **Conclusion:** The majority of tumors were PET+. PET was used in peripheral nodules and older patients. Central tumors were less likely to undergo PET. PET does not predict recurrence or survival but may predict a shorter DFI. The role of PET is limited in TC and AC. **Keywords:** Positron emission testing imaging, Neuroendocrine tumor

Table 1. Patient Characteristics by Typical and Atypical Carcinoids

	PET + N=162 (37.2%)	PET- n=67 (15.4%)	p Values	PET null N=207 (47.5%)
Typical	118 (72.8%)	59 (88.1%)		180 (87.0%)
Age (median)	62	63		56
Sex (%F)	89 (75.4%)	37 (62.7%)	0.001	113 (63.8%)
Tumor size (median)	2.2	1.8	0.05	2.6
Central tumor	30 (24.4%)	13 (22.0%)	0.001	109 (63.7%)
Surgery				
Lobectomy	69 (58.5%)	28 (47.5%)	0.99	131 (72.8%)
Wedge resection	37 (31.4%)	28 (47.5%)	0.99	31 (17.2%)
Bilobectomy	6 (5.1%)	3 (5.1%)	0.99	15 (8.3%)
Pneumonectomy	6 (5.1%)	0	0.99	3 (1.7%)
Lymphadenectomy				
Sampling	55 (46.6%)	22 (37.3%)	0.66	80 (44.4%)
Complete	39 (21.4%)	17 (28.9%)	0.66	72 (40.0%)
Atypical	44 (27.2%)	8 (11.9%)		27 (13.0%)
Age (median)	61	61	0.84	58
Sex (%F)	29 (65.9%)	5 (62.5%)	0.08	18 (66.7%)
Tumor Size (median)	3	2.2	0.52	2.2
Central tumor	13 (29.6%)	2 (25.0%)	0.98	16 (59.2%)
Surgery				
Lobectomy	28 (63.6%)	5 (62.5%)	0.98	17 (63.0%)
Wedge resection	6 (13.6%)	2 (25.0%)	0.98	4 (14.8%)
bilobectomy	3 (6.8%)	0	0.98	3 (11.1%)
pneumonectomy	7 (15.9%)	1 (12.5%)	0.98	3 (11.1%)
Lymphadenectomy				
Sampling	21 (48.0%)	6 (75.0%)	0.15	15 (56.0%)
Complete	22 (50.0%)	2 (25.0%)	0.15	9 (33.0%)

PUB040

Formulation and Evaluation of Embelin Loaded Transfersome for Effective Treatment of Skin Cancer



S. Jain,¹ N. Jain² ¹Pharmacognosy, Bhagyodaya Tirth Pharmacy College, Sagar/IN, ²Pharmacy, Bhagyodaya Tirth Pharmacy College, Sagar/IN

Background: Transdermal drug delivery has made an important contribution to medical practice, but has thus far to fully achieve its potential as an alternative to oral delivery and hypodermic injections. The object of the present study was to formulate and evaluate transfersomal vesicles of embelin a natural benzoquinone derivative as a transdermal drug delivery system. Embelin is obtained from dried fruit of *Embelia ribes* and widely used in potent Cancer, fungal, bacterial and viral infection. **Method:** It was investigated to incorporate the drug in various transfersomal formulations composed of various ratios (1:1, 1:2, 2:1) of different spans-80 and tween-80 prepared by thin film hydration method. The prepared formulations were characterized and optimized. **Result:** The vesicles were spherical in structure as confirmed by transmission electron microscopy. The best entrapment efficiency of embelin in the vesicles was in the 89.86% (F3). The result revealed that embelin in all of the formulations was successfully entrapped with uniform drug content. A transfersomal gel containing 2% of drug, carbopol 934 (1%, 2%, 3% and 4%) and propylene glycol was concluded as the optimized formulation (H3). **Conclusion:** This research suggests that embelin loaded transfersomes can be potentially used as a transdermal drug delivery system for treatment of skin cancer.

PUB041

Potentially Overlooked Branches of the Left Pulmonary Artery



T. Nagata General Thoracic Surgery, Kagoshima University, Kagoshima/JP